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Welcome to MESSENGER (APS Text) at USPTO

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The USPTO production files are current through:  
AUGUST 10,1999   for U.S. Patent Text Data.  
AUGUST 10,1999   for U.S. Current Classification Data.  
AUGUST 10,1999   for U.S. Patent Image Data.

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\* PLEASE USE 305-9000 FOR NEW TELEPHONE NUMBER \*

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More U.S. patent data is now available on APS. The new  
USOCR file contains patents issued in 1970, plus some  
patents that were missing from the USPAT file. See the  
Patents News Folder under the Public Folders in e-mail for  
more information on using the new file. Thank you.

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Help Desk --> 703-305-9000

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The Help Desk is staffed for APS support 7 days/week.  
Monday through Friday:         6:30am - 9:00pm  
Saturday, Sunday, Holidays: 8:30am - 5:00pm

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The Help Desk staff at this number will handle all APS related questions.

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        6:30am - 9:00pm Monday through Friday  
        7:30am - 5:00pm Saturday, Sunday, Holidays

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APS is unavailable Thanksgiving Day, Christmas Day,  
and New Year's Day.

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FILE 'USPAT' ENTERED AT 13:46:08 ON 13 AUG 1999

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* * * * *
*           U. S.   P A T E N T   T E X T   F I L E           *
*
*   THE WEEKLY PATENT TEXT AND IMAGE DATA IS CURRENT         *
*   THROUGH AUGUST 10,1999                                     *
*
*
* * * * *

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=> s (approximat? or interpolat?) (p) (illuminat?) (p) (sun or sunlight or skylight or (sky (w) light))

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898025 APPROXIMAT?
25498 INTERPOLAT?
117930 ILLUMINAT?
39009 SUN
19712 SUNLIGHT
851 SKYLIGHT
5185 SKY
680669 LIGHT

```

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L1      222 (APPROXIMAT? OR INTERPOLAT?) (P) (ILLUMINAT?) (P) (SUN OR S
UNL      IGH T OR SKYLIGHT OR (SKY (W) LIGHT))

```

=> s 11 and 345/clas

```

21282 345/CLAS
L2      5 L1 AND 345/CLAS

```

=> d 12 1-5 fd

US PAT NO:	5,572,635 [IMAGE AVAILABLE]	L2: 1 of 5
DATE FILED:	Jun. 3, 1992	
US PAT NO:	5,380,204 [IMAGE AVAILABLE]	L2: 2 of 5
DATE FILED:	Jul. 29, 1993	
US PAT NO:	4,907,075 [IMAGE AVAILABLE]	L2: 3 of 5
DATE FILED:	Jul. 28, 1987	
US PAT NO:	4,586,038 [IMAGE AVAILABLE]	L2: 4 of 5
DATE FILED:	Dec. 12, 1983	
US PAT NO:	3,675,242 [IMAGE AVAILABLE]	L2: 5 of 5
DATE FILED:	Feb. 25, 1970	

=> d 12 1-5 ccls in hit

US PAT NO:	5,572,635 [IMAGE AVAILABLE]	L2: 1 of 5
US-CL-CURRENT:	345/426, 431; 382/167	
INVENTOR:	Yuri Takizawa, Machida, Japan	
	Shinichiro Miyaoka, Kawasaki, Japan	
	Makoto Kato, Yokohama, Japan	
US-CL-CURRENT:	345/426, 431; 382/167	

CLAIMS:

CLMS(1)

SUMMARY:

BSUM(2)

Alpha-numeric displays are well known in the art and many such types are presently in use. One such type of alpha-numeric display involves the use of a plurality of transparent or translucent lines in the figure of an "8", the appropriate lines of the figure "8" being **illuminated** in order to provide an indication of the selected alpha-numeric character. Prior art alpha-numeric light displays have required relatively high power light sources in order to provide a display of sufficiently high intensity to be discernible in direct **sunlight, approximately** 1,000 ft.-lamberts being required. Systems of this type present obvious problems in that the use of relatively high power per lamp generates large amounts of heat, causing relatively high filament temperature rise which greatly reduces lamp life and causes a problem of heat dissipation. Also, the power source itself and associated circuitry must be increased in size and capacity in order to accommodate such relatively high power requirement display systems.

=> file uspat epo jpo

FILE 'USPAT' ENTERED AT 13:52:38 ON 13 AUG 1999

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* * * * *
*           U . S .   P A T E N T   T E X T   F I L E           *
*
*   THE WEEKLY PATENT TEXT AND IMAGE DATA IS CURRENT           *
*   THROUGH AUGUST 10,1999                                     *
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* * * * *
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FILE 'EPO' ENTERED AT 13:52:38 ON 13 AUG 1999

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* * * * *
*                               G P I                               *
*   E U R O P E A N   P A T E N T   A B S T R A C T S           *
* * * * *
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FILE 'JPO' ENTERED AT 13:52:38 ON 13 AUG 1999

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* * * * *
*                               G P I                               *
*   J A P A N E S E   P A T E N T   A B S T R A C T S           *
*
*   THE FILE IS CURRENT THROUGH APRIL 31, 1999.                 *
* * * * *
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=> s (approximat? or interpolat?) (p) (illuminat?) (p) (sun or sunlight or skylight or (sky (w) light))

FILE 'USPAT'

```
898025 APPROXIMAT?
25498 INTERPOLAT?
117930 ILLUMINAT?
39009 SUN
19712 SUNLIGHT
```

851 SKYLIGHT  
5185 SKY  
680669 LIGHT  
L3 222 (APPROXIMAT? OR INTERPOLAT?) (P) (ILLUMINAT?) (P) (SUN OR S  
UNL IGH T OR SKYLIGHT OR (SKY (W) LIGHT))

FILE 'EPO'

46212 APPROXIMAT?  
3950 INTERPOLAT?  
24455 ILLUMINAT?  
6227 SUN  
1482 SUNLIGHT  
362 SKYLIGHT  
330 SKY  
137882 LIGHT  
L4 7 (APPROXIMAT? OR INTERPOLAT?) (P) (ILLUMINAT?) (P) (SUN OR S  
UNL IGH T OR SKYLIGHT OR (SKY (W) LIGHT))

FILE 'JPO'

74925 APPROXIMAT?  
10802 INTERPOLAT?  
29891 ILLUMINAT?  
7672 SUN  
2666 SUNLIGHT  
177 SKYLIGHT  
842 SKY  
395301 LIGHT  
L5 3 (APPROXIMAT? OR INTERPOLAT?) (P) (ILLUMINAT?) (P) (SUN OR S  
UNL IGH T OR SKYLIGHT OR (SKY (W) LIGHT))

TOTAL FOR ALL FILES

L6 232 (APPROXIMAT? OR INTERPOLAT?) (P) (ILLUMINAT?) (P) (SUN OR S  
UNL IGH T OR SKYLIGHT OR (SKY (W) LIGHT))

=> d 14 1-7 pd; d 15 1-3 pd

EP000566238A2

L4: 1 of 7

DATE PUB: Oct. 20, 1993

US005158250A

L4: 2 of 7

DATE PUB: Oct. 27, 1992

DE004204976A1

L4: 3 of 7

DATE PUB: Jul. 16, 1992

US004883340A

L4: 4 of 7

DATE PUB: Nov. 28, 1989

US004773733A

L4: 5 of 7

DATE PUB: Sep. 27, 1988

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PLEASE ENTER HOST PORT ID:
PLEASE ENTER HOST PORT ID:x
LOGINID:d270lws
PASSWORD:
TERMINAL (ENTER 1, 2, 3, 4, OR ?): 3
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FILE 'USPAT' ENTERED AT 09:58:39 ON 13 AUG 1999

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* * * * *
*       U. S.   P A T E N T   T E X T   F I L E
*
*   THE WEEKLY PATENT TEXT AND IMAGE DATA IS CURRENT
*   THROUGH AUGUST 10,1999
*
* * * * *

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=> file uspat epo jpo; s animat? (p) (sunlight? or skylight?)

FILE 'USPAT' ENTERED AT 09:59:59 ON 13 AUG 1999

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* * * * *
*       U. S.   P A T E N T   T E X T   F I L E
*
*   THE WEEKLY PATENT TEXT AND IMAGE DATA IS CURRENT
*   THROUGH AUGUST 10,1999
*
* * * * *

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FILE 'EPO' ENTERED AT 09:59:59 ON 13 AUG 1999

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* * * * *
*                               G P I
*   E U R O P E A N   P A T E N T   A B S T R A C T S
* * * * *

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FILE 'JPO' ENTERED AT 09:59:59 ON 13 AUG 1999

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* * * * *
*                               G P I
*   J A P A N E S E   P A T E N T   A B S T R A C T S
*
*   THE FILE IS CURRENT THROUGH APRIL 31, 1999.
* * * * *

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FILE 'USPAT'

```

    5998 ANIMAT?
    19731 SUNLIGHT?
    1255 SKYLIGHT?
L1      9 ANIMAT? (P) (SUNLIGHT? OR SKYLIGHT?)

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FILE 'EPO'

```

    1246 ANIMAT?
    1483 SUNLIGHT?
    407 SKYLIGHT?
L2      1 ANIMAT? (P) (SUNLIGHT? OR SKYLIGHT?)

```

FILE 'JPO'

```

    1879 ANIMAT?
    2670 SUNLIGHT?
    184 SKYLIGHT?
L3      0 ANIMAT? (P) (SUNLIGHT? OR SKYLIGHT?)

```

TOTAL FOR ALL FILES

L4 10 ANIMAT? (P) (SUNLIGHT? OR SKYLIGHT?)

=> d 11 1-9 fd

US PAT NO: 5,930,501 [IMAGE AVAILABLE] L1: 1 of 9  
DATE FILED: Sep. 19, 1997

US PAT NO: 5,616,031 [IMAGE AVAILABLE] L1: 2 of 9  
DATE FILED: May 15, 1995

US PAT NO: 5,415,549 [IMAGE AVAILABLE] L1: 3 of 9  
DATE FILED: Mar. 21, 1991

US PAT NO: 5,353,074 [IMAGE AVAILABLE] L1: 4 of 9  
DATE FILED: May 22, 1992

US PAT NO: 5,302,965 [IMAGE AVAILABLE] L1: 5 of 9  
DATE FILED: Oct. 15, 1991

US PAT NO: 5,200,308 [IMAGE AVAILABLE] L1: 6 of 9  
DATE FILED: Dec. 31, 1990

US PAT NO: 4,766,684 [IMAGE AVAILABLE] L1: 7 of 9  
DATE FILED: Apr. 10, 1987

US PAT NO: 3,883,969 [IMAGE AVAILABLE] L1: 8 of 9  
DATE FILED: Jun. 28, 1972

US PAT NO: 3,738,309 [IMAGE AVAILABLE] L1: 9 of 9  
DATE FILED: Jun. 1, 1971

=> d 11 1-9 ccls in hit; d 12 in ab

US PAT NO: 5,930,501 [IMAGE AVAILABLE] L1: 1 of 9  
US-CL-CURRENT: 345/334  
INVENTOR: John M. Neil, 330 Townsend St. Suite 237, San Francisco,  
CA 94107

SUMMARY:

BSUM(13)

**Animated** clocks include: "XEarth", which draws an **animated** picture of the rotating Earth on the video display; "Seize the Day", which **animates** a single static image to reflect the time of day; as well as "World Watch", which is a typical world clock depicted as a pattern of **sunlight** moving across a map of the earth. These **animated** clocks provide the user with a general indication of the time of day but require the computer to produce **animated** images on the fly. Since **animation** requires the computer to generate the displayed images, the images are necessarily relatively crude, and, consequently, the displayed images are typically neither aesthetic nor particularly realistic.

US PAT NO: 5,616,031 [IMAGE AVAILABLE] L1: 2 of 9  
US-CL-CURRENT: 434/38; 345/139, 426; 434/33, 307R  
INVENTOR: G. Edward Logg, Los Altos, CA